

STS-109 LAUNCH DAY VIDEO REVIEW
KSC Photo/Video Analysis Team
1 March 2002

Significant Anomalies

None

Minor Anomalies

None.

Funnies

Shortly after SRB separation, particle was observed moving past SSME Cluster (TV-13). Due to video quality, it was difficult to determine the particle type and origin. More detailed analysis will be performed from high speed films.

Observations

Particles (possibly forward RCS paper cover) observed moving past vertical stabilizer just prior to plume recirculation (TV-13).

Bird observed in field of view casting a shadow on the ET Ogive (OTV 071), but was identified not to be in close proximity to the vehicle (TV-4A).

Small particle was observed falling on the +Z side of RH wing during SSME ignition. No contact with Orbiter observed (OTV 054).

Free burning hydrogen was visible near the vertical stabilizer (OTV 070, 041, 051, TV-7A, TV-21).

Numerous pieces of ice from the ET/ORB umbilical shook loose and contacted umbilical sill tiles, but no damage was detected (OTV 009, 054, 063).

LH2 and LO2 T-0 umbilical disconnect was normal (OTV 049, 050).

Frost was visible around -Y and +Y ET GOX vent louver (OTV 060, 061).

Pieces of aft skirt instafoam fell out of the SRB plume during flight (TV-4A).

Notes

A total of 19 videos were made available for review.

Review of long range tracking films is scheduled to begin Saturday, March 2, 2002.

Armando Oliu
NASA – KSC

Abdi Khodadoust
Boeing - Huntington Beach

Carlos Ortiz
Boeing – Huntington Beach